



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,367	10/30/2003	Manish Sharma	100201070-6	7900
7590	09/01/2004		EXAMINER	
HEWLETT-PACKARD COMPANY			HO, HOAI V	
Intellectual Property Administration			ART UNIT	PAPER NUMBER
P.O. Box 272400				
Fort Collins, CO 80527-2400			2818	

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

(A)

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/697,367	SHARMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hoai V. Ho	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 30 October 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 13-17,20 and 21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 13,15-17,20 and 21 is/are rejected.  
 7) Claim(s) 14 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 30 October 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

1. Claims 13-17, 20 and 21 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 13, 15-17, 20 and 21 are rejected under 35 U.S.C. 102(ab) as being anticipated by Christeson U. S. Patent (USP) No. 6622243.

As per claim 13, Figure 1 of Christeson is directed to a memory back-up system comprising: a volatile memory cell (101); a non-volatile memory cell (102) that is interfaced with the volatile memory cell; a common control line (104) connected to the volatile memory cell and the non-volatile memory cell, the common control line allowing data to be

simultaneously written to the volatile memory cell and the non-volatile memory cell (col. 3, lines 21-29).

As per claim 15, Christeson is silent to disclose further comprising a second control line which in combination with the common control line provides selection of the volatile memory cell. However, this feature is seen to be an inherent teaching of the device since a means for providing a process of the system is disclosed and it is apparent that some type of control lines such as a control word line or control column line must be present to select the volatile memory cell for the system to function as intended. For example, Christeson in column 2, lines 45-47 discloses that the volatile memory cell is a random access memory device, whose memory cell location needs the control word line and control column line to select the memory cell location as being understood by those skilled in the art.

As per claim 16, Christeson is silent to disclose further comprising a third control line which in combination with the common control line provides selection of the non-volatile memory cell. However, this feature is seen to be an inherent teaching of the device since a means for providing a process of the system is disclosed and it is apparent that some type of control lines such as a control word line or control column line must be present to select the non-volatile memory cell for the system to function as intended. For example, Christeson in column 2, line 48 discloses that the non-volatile memory cell is a flash memory device, whose memory cell location needs the control word line and control column line to select the memory cell location as being understood by those skilled in the art.

Claims 17, 20 and 21 are rejected for the same reason as set forth above in claims 13, 15 and 16.

4. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. Kondo et al. (USP 6401163) in col. 2, lines 12-16 and fig. 1, Kakihara (USP 5956749) in claim 3, Takahashi (USP 5732408) in col. 6, lines 16-20 and fig. 5A, and Osamu et al. (JP2001113355) in "Solution" disclose a writing data simultaneously to the volatile memory cell and the non-volatile memory cell.

#### **Allowable Subject matter**

5. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:  
Claim 14 includes allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure, taken individually or in combination, does not teach or suggest the claimed invention wherein the volatile memory cell is a DRAM memory cell and the non-volatile memory cell is an MRAM memory cell.

7. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

8. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02 (b)).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is (571) 272-1777. Other inquiries of this application should be called to (571) 272-1562 or the fax number (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoai V. Ho  
Primary Examiner  
Art Unit 2818



hvh  
August 18, 2004